

# RWDC Connecticut

## K-Five Kennedy High School, Waterbury



Left to Right: Jordan DeAngelis, William Betances, Klejton Dinkollari, Lefter Dinkollari, Michael Matic, Ken Ludwig (Coach)

U.S. Department of Energy

10

**REAL** World Design Challenge  
**2009**

**Coach: Ken Ludwig** holds B.S. and M.S. degrees from Central Connecticut State University and a Sixth Year in Administration from Sacred Heart University. A technology teacher for the past 14 years, he has taught Web site production, CAD, CAM, PLTW, CISCO, Robotics, and other courses. He has supervised summer and after-school youth training programs and the Connecticut Technology Innovation Academy. Mr. Ludwig continues to be a host for SEPT at MIT and is a certified firefighter in his community. His hobbies include snow and water sports. Prior to teaching in Waterbury, Mr. Ludwig was a regional distributor for electronic equipment and machine tools, where he worked with both military and commercial contracts.

---

**William Betances** is a sophomore. He has lived in both Puerto Rico and the Dominican Republic, but moved to Waterbury seven years ago. His favorite subjects are mathematics and physical education. He is a member of the Waterbury Police Explorers and his extracurricular activities include baseball and basketball. He would like to pursue a career in major league baseball or as a computer technician.

**Jordan DeAngelis** is a senior who enjoys math and physics. He received first and second honors throughout high school and is ranked in the top 10 percent of his class. He is the captain of the Kennedy Bowling Team and has enlisted in the United States Air Force Reserves as a Fighter Aircraft Maintenance Crew Chief. He plans to attend Embry-Riddle Aeronautical University after basic training and tech school for the Air Force. Jordan aspires to be a pilot for the Air Force or an airline company.

**Klejton Dinkollari** is a senior. He was born in Albania and moved to the United States seven years ago. He attends honor classes and AP Calculus, which is his favorite subject. His extracurricular activities include playing soccer and listening to music. He feels playing soccer is a great way to stay in shape and learn how to work with others, and music calms and relaxes the body and mind. He will be attending the University of Connecticut in the fall of 2009 with a major in business.

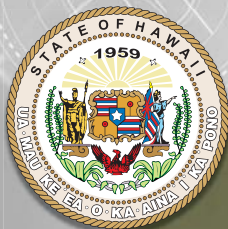
**Lefter Dinkollari** is a senior. He was born in Greece and moved to the United States seven years ago. He enjoys math and physics. He has received first and second honors throughout his high school career and is attending honors classes and AP Calculus. He has played soccer for three years at Kennedy and is a member of the Key Club, Chess Club, and Yearbook Club. He has also accomplished 40 hours of community service. He will be attending the University of Connecticut in the fall of 2009 with a major in a field of engineering.

**Michael Matic** is a senior. He is a member of the SOAR (School of Academic Renown) program, an honors-based program within the school. His favorite subjects include psychology, Italian AP, pre-calculus, and English. An Honor Roll student, he received awards for chemistry and perfect attendance. His extracurricular activities include the Connecticut Innovation Academy, Italian Club, Yoga Club, and Chess Club. Michael aspires to attend Sacred Heart University in Fairfield, CT. His ultimate goal is to enter the medical field. His hobbies include martial arts, finding rare video games, and playing chess.

# RWDC Hawaii

## ndc!!!

### Iolani School, Honolulu



Left to Right: Amy Ko, Anya Liao, Jessica Lynn Saylor, Celia Ou, Adeline Li, Julia Zhang;  
Not pictured: Carey Inouye (Coach)

U.S. Department of Energy

12

**REAL** World Design Challenge  
**2009**

**Coach: Carey Inouye** received his A.B. from Ripon College in mathematics and physics, and his M.S. and Ph.D. in physics from the University of Hawaii. His decision to become a teacher was influenced by a passion for learning that surfaced in college and grew in graduate school, as well as a desire to inspire this passion in others. His three important scientific discoveries include: Faraday's discoveries of electromagnetism, Quantum Mechanics, and Einstein's  $E=mc^2$ . His singular hobby is golf.

---

**Amy Ko** is a senior workaholic. While she enjoys all of her classes, from AP Calculus to AP Latin to AP Biology to AP Economics, her favorite is AP Physics C. Her career goals vary from engineering to medicine, depending on whom she has spoken to most recently. She is an award-winning pianist who loves to spend vacations watching old movies and completing college applications.

**Adeline Li** is a senior whose creative talents strongly influence the team. Her career interests range from architecture to engineering to fashion design ... all involve drawing. She is always drawing, from whimsical characters to contemporary architecture to realistic fashion models. Although she enjoys her art class, her favorite class is AP Physics C.

**Anya Liao**, a senior, was born in China, grew up in Houston, TX, and now lives in Honolulu. All this moving has left her confused. Her strongest talent is drawing caricatures of people she knows, though most are not very flattering. While her career plans are still very much up in the air, her favorite class is AP Physics C.

**Celia Ou** is a senior and a talented violinist. She is the concert mistress of the Iolani School Orchestra and the Hawaii Youth Symphony Orchestra. She is presently rehearsing Violin Concerto No. 3 by Camille Saint-Saens for a performance with the Honolulu Symphony Orchestra. Her favorite subject is AP Physics C.

**Jessica Lynn Saylor** is a senior who is the captain of the undefeated Math Team and is the drum major of the Iolani Marching Band. She is a member of the cross-country and swim teams. She is considering a career in engineering. While Jess enjoys all her math and science classes, AP Physics C is her favorite.

**Julia Zhang** is a senior who is a talented writer. In fact, her blog was once listed in Wikipedia.com as the primary example of a "literary vignette." She is on the state champion Speech and Debate Team as a policy debater. Her goal is a career in medicine. Despite her extraordinary talents in many different fields, her favorite subject is AP Physics C.

# RWDC **Kansas**



**Baldwin High**  
**Baldwin High School USD 348, Baldwin City**



Left to Right: Lauren Barnes, Carson Barnes, Colby Soden, Colin Busby; Not pictured: Pam Davis (Coach)

U.S. Department of Energy

14

**REAL World Design Challenge**  
**2009**

**Coach: Pam Davis** went to Baker University for her undergraduate degree in math, and to Emporia State University for her Master's degree in special education. She is the High School Gifted Facilitator for the Eastern Central Kansas Special Education Coop. She became a math teacher in 1979 because she was told there was a great shortage of math teachers in Kansas. She became a gifted teacher because she wanted to work with students who had a great potential that might go unrealized. By far, she believes the discovery of penicillin is the most important scientific accomplishment; after that, the discovery of vaccines for polio and for tetanus and other diseases are very important. Her hobby is helping her students enter competitions like this one and be successful, even if it takes a lot of weekends and weeknights to finish their projects.

---

**Carson Barnes** is a 15-year-old sophomore and has lived in Kansas all of his life. He lives near Ottawa, on a row crop farm where he enjoys working with his dad. He is involved in many sports and during the summers, has medaled in four AAU National track meets. He is also the vice president of his class, the president of his 4-H Club, and he is involved in FCA. In school, his favorite classes are math and chemistry. He likes to woodwork, play basketball, read, and work with his hunting dog in his spare time.

Junior **Lauren Barnes** was born in 1991 in Oklahoma City, OK, and has grown up on a farm in Ottawa. At school, she participates in tennis, track, Scholar's Bowl, National Honor Society, Culinary Team, and Fellowship of Christian Athletes. Lauren is vice president of Student Council, enjoys organizing school activities, and working with her classmates. As a member of the Culinary Team, she will be competing this Spring at a National Restaurant Management Competition in San Diego, CA. Outside of school, Lauren likes to help her dad farm, spend time with family, cook, and have dance parties with her friends. In the summers, you can find Lauren driving a tractor under the blue Kansas skies.

Senior **Colin Busby** was born in 1991 in Kansas, and grew up in a house in the country. At school, he participates in many activities, including soccer, wrestling, Math Team, Newspaper editor-in-chief, Concert Choir, Jazz Band, Scholar's Bowl, NHS, and Debate. He plans on attending a college/university with a major in engineering and a minor in music. Colin's biggest interest is music — he plays the electric bass. Colin's favorite pastime is strolling across the expansive, scenic beaches of Kansas. He likes cats (short-haired only), not dogs. His favorite food is espresso chocolate. He adores gnomes.

Sophomore **Colby Soden** was born in 1992 in Hiawatha, and moved to Baldwin in 2000. Outside of school, Colby is a member of the Boy Scouts of America. He has held many leadership positions and works at a camp most of his summer. Colby is active in his youth group and will be going on a missions trip to Savannah, GA, this summer. He has been a varsity member of the wrestling team for two years. Colby also has participated in Debate, FCA, and the Math Team. Colby's interests include computer programming, video games, and Russian tap dancing.

# RWDC **Massachusetts**

Clipper Tek

Newburyport High School, Newburyport



Left to Right: Tom Svirsky, Molly Picillo, Travis Souther, Irene Jacqz, Philip Arets, Belle Douglass, Thayer Adsit; Not pictured: Sarah Leadbeater (Coach)

U.S. Department of Energy

16

**REAL** World Design Challenge  
**2009**

**Coach: Sarah Leadbeater**, an industrial designer by training (BID, Syracuse University, 2001), wandered into the classroom almost accidentally a few years ago and had so much fun that she never left. Currently she teaches industrial design, CAD, and web design at Newburyport High School in Newburyport, MA, and will be teaching an integrated physics and engineering class in the fall. In addition to her teaching duties, she continues to work as a freelance designer on a variety of projects (primarily web-based). In her free time she is an avid kayaker.

---

Senior **Thayer Adsit** is a High-Honor Roll student, National Honor Society member, and captain of the Varsity soccer team and the indoor and outdoor track teams. In addition to athletics, Thayer volunteers for Special Olympics and actively participates in science fairs and engineering and design competitions. He received second place recognition in the 2008 Massachusetts State Science Fair and was the international winner of PTC's 2007 and 2008 Design Quest Challenge. In the summer, Thayer is employed as a product designer at Prodev, Inc. in Seabrook, NH. Thayer plans on pursuing a degree in mechanical engineering.

**Philip Arets**, a senior, has been taking Honors and AP classes throughout high school. His favorite classes in mathematics are statistics, geometry, and this year, AP Calculus. He has participated in community service projects independently and with the National Honor Society. Philip assists at soccer clinics coaching children ages four to eight. Philip intends to play intramural soccer at the college level and will major in engineering.

**Belle Douglass** is a freshman. Her favorite subjects include math, Robotics, and CAD. Belle enjoys reading, and is a member of the swim team and Environmental Club. Belle hopes to attend RPI to study aeronautical engineering and physics. She won the Fireman's award in seventh grade and the John Pramberg award in eighth grade. Both awards were given for demonstrations of leadership and community service. Belle is currently working on her Girl Scout Silver Award and organizing a team to participate in the Massachusetts 20-mile Walk for Hunger.

**Irene Jacqz** is a senior. She is president of the Environmental Club, first in her class, and involved in Model United Nations, National Honor Society, the student-run art gallery, and the literary magazine. She tutors regularly, runs cross-country and track, and will major in environmental engineering at Columbia University next year. Irene enjoys sailing, photography, and snowboarding.

**Molly Picillo** is a freshman. Her favorite subjects include Advanced Robotics, Web Design, and Honors Geometry. She received the algebra book award in eighth grade and recently achieved High Honors and hopes to continue to do so. She plays soccer in every season but summer and she volunteers occasionally for the Salvation Army. She plans on majoring in zoological studies to become a zoo veterinarian.

Senior **Travis Souther** plays football and lacrosse and is highly involved in Newburyport's technology/engineering program. As a freshman, Travis won the school CAD award. He also designed and marketed flower box boats as part of a program called "Lowell's Clipper Design." As a sophomore, he participated in "The Windy 500," a team challenge sponsored by the Boston Museum of Science. The challenge was to create a wind-powered vehicle capable of propelling a person down a track as fast as possible. Travis' team had the fastest time. Upon graduation, Travis plans to join the Army and to eventually earn an engineering degree.

Senior **Tom Svirskey** is an Honor Roll student. He will be attending Worcester Polytechnic Institute in the fall to major in mechanical engineering. Tom plays soccer for his high school and for a club team. He also runs indoor and outdoor track. In his spare time, he likes to fish. Tom also contributes to his community. He has helped teach little kids how to play soccer and to be better kids.

# RWDC Minnesota

Hutch Innovators  
Hutchinson High School, Hutchinson



Left to Right: Alice Seagren (Commissioner of Minnesota Department of Education), Jacob Ballard, Erik Bute, Jesse Brooks, Katherine Weikle, Daryl Lundin (Coach), Lt. Col. Deon Ford (133rd National Air Wing)

U.S. Department of Energy

18

**REAL** World Design Challenge  
**2009**

**Coach: Daryl Lundin** is a 2001 graduate of St. Cloud University, where he received his Bachelor of Science degree in technology education, and in 2008, his M.S. in technology education. As a technology teacher, Mr. Lundin brings the theories of engineering, design, and architecture to his students. He is also a coach of the FIRST Robotics and Science Olympiad teams. Mr. Lundin finds Bernoulli's Theory of Lift one of the most interesting scientific discoveries, not only as it pertains to flight, but also as it pertains to sailing. Sailing, camping, and family are Mr. Lundin's favorite hobbies.

---

Senior **Jacob Ballard's** favorite subjects include math, science, and CAD-based classes. He enjoys these classes because they give him a challenge. Jake's extracurricular activities include football, basketball, RWDC team, track, working at a shooting range, and sporting clays. Jake was nominated second team All-Minnesota Conference for football and is one of the two captains on the basketball team. Jake has been mixing sound at his church for the last four years and he is also a member of Key Club. He plans to attend SDSU this coming fall, majoring in civil engineering.

Junior **Jesse Brooks'** favorite subject in school is math. He participates in basketball, track, cross-country, and math league. He annually volunteers to help clean up the Crow River in his community. Jesse has made the A honor roll every trimester in high school. He plans on attending a four-year college to earn a degree in engineering and is interested in majoring in aerospace, mechanical, or electrical engineering. Jesse is planning to attend a college that has a good engineering field and is close to home.

Junior **Erik Bute's** favorite subjects in school include history, gym, foods, engineering, and welding. He was captain of the football team this year. He plays football and runs track and field. Erik also races snow-cross snowmobiles during the winter. He would like to go to college for accounting.

**Katherine Weikle** is a senior. Her favorite subjects are band, math, and science, specifically calculus and chemistry. She participates in many music-related extracurricular activities, including symphonic band, marching band, fall musical, and other solo/ensemble groups. She also participates in Knowledge Bowl, Science Olympiad, and club soccer. During the summer, she volunteers as a camp counselor at Club 218, a free day camp for underprivileged children. In the fall, Katherine will attend Concordia College in Moorhead, MN, to major in chemistry.

# RWDC **Oklahoma** **2009**

JET (Junior Engineering Team)  
Francis Tuttle Technology Center,  
Oklahoma City



Left to Right: Mark Pierce (Coach), Alice Tholen, Sean Stephens, Jessica Lilienthal,  
Andrew May, Jacob Niles, Leith Prise

U.S. Department of Energy

20

**REAL** World Design Challenge  
**2009**

**Coach: Mark Pierce** is a third generation science teacher. He teaches Pre-AP Chemistry, AP Chemistry, Principles of Engineering, and Engineering Design and Development at Francis Tuttle Technology Center's Pre-Engineering Academy in Oklahoma City. Mark has been teaching and coaching for 13 years. Mark has a B.S. in chemistry education from the University of Central Oklahoma and an M.Ed. in educational administration from Southwestern Oklahoma State University. Mark is also one of the team leaders for the FIRST Robotics program at Francis Tuttle. His idea of the top three inventions/discoveries are refrigeration, alternating current, and penicillin.

**Jessica Lilienthal** is a senior at Putnam City North High School. She is also a third year student at the Francis Tuttle Pre-Engineering Academy. Her favorite subjects are English and mathematics. She loves swimming, arts and crafts shows, and reading. This fall, she will attend Oklahoma State University and major in civil engineering. She was JET's Project Communication Specialist.

**Andrew May**, a senior at Edmond North High School, has attended the Pre-Engineering Academy at Francis Tuttle since the beginning of his sophomore year. He is a co-president of Mu Alpha Theta and head programmer of the school FIRST Robotics team, and he does many presentations over many of the things that go on in the Pre-Engineering Academy. Outside of school, Andrew serves as a religious education teacher and has earned the rank of Eagle in the Boy Scouts of America. Andrew plans to earn his Master's degree in electrical engineering.

**Jacob Niles** is a senior currently attending Mount Saint Mary High School and a first year student at the Francis Tuttle CAD/CAM Program. His favorite subjects are history, science, and art. He is the founder and former president of the Rocket Science and Astronomy Team at Mount St. Mary. Jacob is involved with the JETS Team. He is looking to go to Oklahoma University or the University of Notre Dame. Jacob wants to major in architecture or design, with the intent to become an architect. Jacob's hobbies are Tae-Kwon-Do, fencing, and sailing.

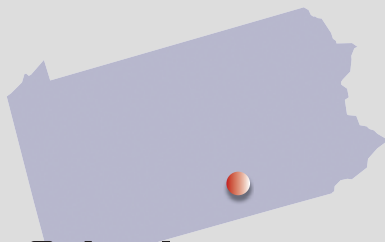
**Leith Prise** is a senior at Edmond Memorial High School. His favorite subject is the Computer Aided Design class at Francis Tuttle. For the last two years of his high school career, Leith has taken an AP English and AP History credit. During his first two years of high school, he played soccer for the school team, and during his senior year he took fencing for two months. Leith has yet to decide on a college and is torn between video game design and architectural drafting.

**Sean Stephens** is an 18-year-old senior, works at a carwash, lives on his own, and plans to attend Oklahoma State University to become a civil or electrical engineer. Sean's favorite subjects are history and the elective engineering courses offered at the Francis Tuttle Pre-Engineering Academy. Sean has spent most of his school time doubling math and sciences, coupled with AP History and English classes. Outside of school, he plays guitar, works, and goes to local musicals, plays, and many metal concerts.

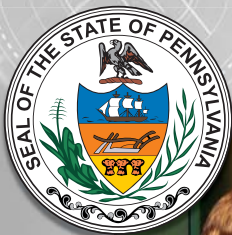
Senior **Alice Tholen's** favorite subjects are math and chemistry. Alice is involved in the following extracurricular activities: Mu Alpha Theta, FIRST Robotics, BEST Robotics, Pre-Engineering Academy Mentoring Program, National Technical Honor Society, National Honor Society, Real World Design Challenge, and Girl Tech. She is the founder of the Pre-Engineering Academy Mentoring Program, co-president of Mu Alpha Theta, safety captain of 1561 FIRST Robotics team, and the project scientist of JET. Alice plans on either attending University of Oklahoma and majoring in chemical engineering or University of Arkansas Fort Smith and majoring in mechanical engineering.

# RWDC Pennsylvania

## 2009



CVHS  
Cumberland Valley High School,  
Mechanicsburg



Left to Right: Jeffrey Pope, Vladimir Grinevich, Cody Ambrose, Kyle Gochenaur;  
Not pictured: Michael Flowers (Coach)

U.S. Department of Energy

22

**REAL** World Design Challenge  
**2009**

**Coach: Michael Flowers** is a Technology Education teacher at Cumberland Valley High School in Mechanicsburg, PA. He teaches the Drafting, Advanced Drafting, CAD, Advanced CAD, Architectural Drafting, and TV Production courses. Mr. Flowers earned his B.S. in industrial arts from Millersville University in 1975 and his M.S. in communication from Shippensburg University in 1979. He has a PA Instructional Media Specialist certificate and is a Pro/Engineer trainer. Mike is a Technology Student Association advisor, member of PA-TSA Board of Directors, and regional VP with the Technology Education Association of Pennsylvania. He enjoys soccer, fishing, and spending time with his family and two dogs.

---

**Cody Ambrose** is a junior. Cody's favorite subjects are Computer-Aided Drafting (CAD), Advanced CAD, and chemistry. He participates in the Technology Student Association (TSA), French Club, National Honor Society, and he plays soccer. He plans to attend Penn State University and major in architecture. His career goals are to become either an architect or a civil engineer.

**Kyle Gochenaur** is a 17-year-old junior. In addition to the Real World Design Challenge, he is a member of the Technology Student Association and the Boy Scouts of America. Outside of school, he enjoys hunting, tinkering, and flying kites, including aerial photography.

**Vladimir Grinevich** is a senior. He is an excellent student who strives to do the best in everything that he does. He is involved in several extracurricular activities, such as the Technology Student Association and concert band. In the TSA, he has held the offices of president, vice president, and sergeant-at-arms. Also, Vladimir is part of his church band, orchestra, youth choir, and men's choir. He has been on the honor roll since sixth grade and is now a member of the National Honor Society. Vladimir plans to attend Penn State University, majoring in civil engineering.

**Jeffrey Pope** is currently a junior. His favorite academic subjects include various math and science courses as well as CAD classes. He is also an honor roll student and ranked 23rd in the class. Some of his other extracurricular activities include National Honor Society, Club Green, Life Smarts Team, Cumberland Valley Ice Hockey Club, and Technology Student Association. He has served as both chapter and regional president for TSA. After graduation, he plans to attend Virginia Polytechnic Institute and major in aerospace engineering.

# RWDC Vermont

Aeroblade  
South Burlington High School,  
South Burlington



Left to Right: Thomas Piper, Michael Gaffney, Jonathan Girard, Varun Tej Gonuguntla, Amsal Karic, Stephen Barner (Coach)

U.S. Department of Energy

24

**REAL** World Design Challenge  
**2009**

**Coach: Stephen Barner** is a Design Technology teacher at South Burlington High School, where he has taught since 1992. Steve has been teaching Technology Education for 22 years. He received his undergraduate degree from the University of Vermont and a Master's in Education from St. Michael's College. He became a Design Technology teacher because he had a history of working as a mechanic and found that he enjoyed teaching others about the use and maintenance of their machines. He believes the three most important scientific discoveries have been the structure of DNA, Newtonian physics, and the Second Law of Thermodynamics.

---

**Michael Gaffney** is a senior who has attended a variety of schools around Vermont. He is known for his knowledge of topics as diverse as math, art, philosophy, finance, computer science, poker, languages, and hip-hop production. Outside of school, Michael serves as a captain to his debate team, has received multiple awards, and participates in a wide variety of extracurricular activities. After studying mathematics at a university, he plans to start a financial firm in Dubai or New York City. Michael lives in Burlington and Williston, VT.

**Jonathan Girard** is a freshman. Jon is a member of the Junior Civil Air Patrol and has a special interest in aircraft design, as his father owns a small plane.

**Varun Tej Gonuguntla** is a 16-year-old senior. Tej was born in a small town of Badvel, India, which is very small, yet densely populated. His hobbies are playing tennis, collecting coins, and watching television. Tej likes math and biology and wants to become a doctor. Tej was a top 10 scorer in Math Club for the entire state of Vermont. He was also in the American Regional Math League team for two consecutive years. Tej is a participant in the National Ocean Sciences Bowl.

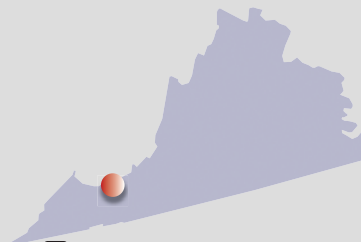
**Amsal Karic** is an 18-year-old senior who resides in South Burlington. He lived in Karlsruhe, Germany, for nine years before coming to the United States. Amsal is fluent in four languages and, besides the Real World Design Challenge, he is involved in the rowing club, the debate team, and the Scholar's Bowl Team. He has participated in a Habitat for Humanity trip to Rocky Mount, NC, and community service events held by the National Honor Society. He hopes to become an aerospace engineer working collaboratively with NASA on future space shuttle and rocket design.

**Thomas "Alex" Piper** is a sophomore. Alex is a top student in math and science, plays guitar, and is an avid hockey player.

# RWDC Virginia

## 2009

Air Heads  
Giles County Technology Center,  
Pearisburg



Left to Right: Ryan Shelor, Steffan Frazier, Travis Scott, Elizabeth Daddazio, Donny Sirry, Devan Vest, Kemper Fox, Sandra Kelley (Coach)

U.S. Department of Energy

**Coach: Sandra L. Kelley** is a Drafting/Pre-Engineering instructor at Giles County Technology Center. She earned an A.A. degree in mechanical drafting and design technology in 1986 and received her Bachelor's degree in vocational education (CTE) from Virginia Tech in 1991. She has worked as a draftsman, CAD operator, and designer before becoming an educator. She believes that global warming is the most important "green" scientific discovery along with the three Laws of Motion and the Pythagorean Theorem. She enjoys making stained glass windows in her spare time.

---

Junior **Elizabeth Daddazio** attends Giles High School, the Giles County Technology Center, and the Southwest Virginia Governor's School. She is involved in Monogram, Pep, History, and Junior/Senior Spanish Clubs, S.A.D.D., F.F.A., Spanish National Honor Society, and National Honor Society. Elizabeth is active in jazz, symphonic, and marching band, brass ensemble, soccer, and horseback riding. Elizabeth plans on attending college for architecture and interior design.

**Kemper Fox**, a senior, attends Giles High School, the Giles County Technology Center, and the Southwest Virginia Governor's School. He has played trombone in the band for five years and is the band's vice-president and a section leader. Kemper is captain of the tennis team. He is on the science M.A.C.C. team and captain of the all-around M.A.C.C. team. He is a member of the National Honor Society. Kemper will be attending Virginia Tech in fall 2009 and plans to major in aerospace engineering.

**Steffan Frazier** is a junior at Giles High School and the Southwest Virginia Governor's School. He is a member of FBLA, history club, symphonic and jazz band, National Honor Society, science club, math M.A.C.C., and Varsity baseball. In his spare time, he enjoys fishing, hanging out with friends, and listening to music. His favorite subject in school is mathematics. Steffan plans to attend Virginia Tech and major in chemical engineering or pre-medicine.

Senior **Travis Scott** attends Giles High School and the Giles County Technology Center. He was recently inducted into the National Honor Society and is an Eagle Scout. He has run cross-country and is on the Varsity soccer team. He also plays indoor soccer. Travis' favorite subject is Drafting/Pre-Engineering. His interests include history, guitar, and meeting new people. He plans to attend Virginia Tech or Radford University for a year and then transfer to the University of Texas ROTC program as an engineering or architecture major.

**Ryan Shelor**, a junior at Giles High School, is a first-year drafting student at the Giles County Technology Center and attends the Southwest Virginia Governor School. His favorite subject is math and he was recently inducted into the National Honor Society. Ryan takes part in many extracurricular activities, such as varsity soccer, church youth group, producing videos, and playing trumpet in the school Marching Band. In the future, he would like to attend Virginia Tech and major in mechanical or civil engineering.

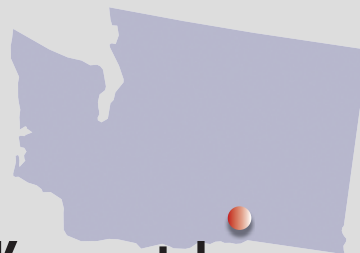
**Donnie Sirry**, a senior at Giles High School, is a second-year drafting student at the Giles County Technology Center. Donnie has won first place in the SkillsUSA Promotional Flyer district competition, which has earned him a chance to participate in the state-level competition in March 2009. Donnie participates on the high school track team, where he competes in sprinting, shot put, and discus throwing. In his spare time, he enjoys playing the guitar and listening to music. His future educational plans are undecided.

**Devan Vest** is a senior at Giles High School and a second year drafting student at the Giles County Technology Center. Devan has participated in the SkillsUSA Technical Drafting state competitions two years running. Devan is the president of the school band, and participates in the symphonic, marching, and jazz band. Devan plays on the high school tennis team and is a member of the Monogram Club. This fall, Devan plans to join the Corps of Cadets and major in electrical engineering at Virginia Tech.

**RWDC  
2009**

**Washington**

**Bernoulli's Brainchild  
Kamiakin High School, Kennewick**



Left to Right: Rhyker Benavidez, Senthuran Thevutharan, Joshua Dunham, Chelsea Greenslitt, Matthew Gerboth, Donovan Casey; Not pictured: Terrance Casey (Coach)

U.S. Department of Energy

28

**REAL World Design Challenge  
2009**

**Coach: Terrance Casey** graduated from Montana State University in 1985. He is a licensed architect and has been with CKJT Architects of Kennewick, WA, since 1988. Recently he earned his Master of Architecture degree and is pursuing LEEDs environmental design certification. As Assistant Scoutmaster with Boy Scouts of America, Terrance's favorite activities are back-packing and Klondike winter camping. Always interested in new developments in science and technology, Terrance was thrilled when he was asked to coach the RWDC team. He saw his involvement as an opportunity to encourage the enthusiasm of son, Donovan, and his peers in their fledgling scientific/engineering goals.

Senior **Rhyker Benavidez** was born in Silver City, NM. At school, he participates in academic competitions including Engineering Day, Knowledge Bowl, Math Competition, Science Bowl, and Science Olympiad. He also participates in extracurricular activities including Bell Choir and his school's symphony. His athletic activities include cross-country and track. He is a member of the National Honor Society and viola section leader in Kamiakin's String Ensemble. Rhyker has also been commended as an AP Scholar with Distinction, National Hispanic Scholar, and a National Merit Finalist. He plans to pursue mathematics and chemistry at the University of Oklahoma.

**Donovan Casey** is a senior and native Washingtonian. He participates in Knowledge Bowl, Science Bowl, Science Olympiad, National Honor Society, Boy Scouts, cross-country, and track. He is an Eagle Scout and AP Scholar with Distinction. He has also been honored as Most Inspirational on the cross-country team for two years, and he received the Kennewick Police Chief's Award for Excellence for his Eagle Scout Project. He plans to pursue a double major in mechanical engineering and mechanical engineering technology at Montana State University.

**Joshua Dunham** is an 18-year-old senior. He participates in Knowledge Bowl, math competitions, and various science competitions. He is very musical, composing music as well as playing cello. In addition to music, mathematics, and science, he also studies French. Though accepted to Lewis and Clark College, he is awaiting the responses of both Harvard and Yale before deciding which college he will attend. He placed first and second in consecutive regional science fairs and won an expense paid trip to Western Washington University's summer science camp. He is presently an AP Scholar with Distinction and a commended National Merit Scholar.

**Matthew Gerboth** is a senior who enjoys competing in Science Bowl and Science Olympiad. In addition to taking a rigorous AP course load, Matthew also participates in String Ensemble, Symphony Orchestra, local community theater groups, and German Club. He is currently the treasurer for the Instrumental Music Club. Matthew maintains a 4.0 GPA and plans to study material science and engineering.

**Chelsea Greenslitt** is a senior and native of Kennewick, WA. In the last two years, she has received the awards of National Merit Commended Scholar and AP Scholar with Distinction. She is the president of DECA, the co-commissioner of Link Crew, and the treasurer of National Honor Society. Besides these clubs, she participates in Knowledge Bowl, Math Competition, and Science Olympiad. She is active with the Red Cross, having run four blood drives over the last two years. She plans on attending the University of Washington, pursuing a career in marketing and business.

**Senthuran Thevutharan** is a senior who hails from Eastern Washington, where he is a Valedictorian at his high school. He has served as ASB Junior Class vice president, treasurer of International Club, and vice president of National Honor Society. He enjoys playing tennis as co-captain on the Varsity team and volunteering at Kennewick General Hospital. He participates in Knowledge Bowl, Math Competition, and Science Bowl. He has been selected as a semi-finalist in several national science competitions, such as the Intel Science Talent Search, and took part in the Washington Aerospace Scholar Program. He intends to pursue mechanical engineering in college.